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## **CLAIMS**

- 1. A therapeutic agent or prophylactic agent for a disease requiring regulation of cytokine production, a disease requiring nitrogen monoxide production, or an allergic disease, characterized in that the therapeutic agent or prophylactic agent comprises as an effective ingredient a fucoidan and/or a degradation product thereof.
- 2. The therapeutic agent or prophylactic agent according to claim 1, wherein the fucoidan is derived from an algae or Echinodermata.
- 3. The therapeutic agent or prophylactic agent according to claim 1 or 2, wherein the cytokine is an interleukin or an interferon.
- 4. The therapeutic agent or prophylactic agent according to claim 3, wherein the interferon is interferon-γ.
- 5. The therapeutic agent or prophylactic agent according to claim 3, wherein the interleukin is interleukin-12.
- 6. The therapeutic agent or prophylactic agent according to claim 1 or 2, wherein the allergic disease is a disease requiring suppression of IgE production.
- 7. The therapeutic agent or prophylactic agent according to any one of claims 1 to 6, wherein the therapeutic agent or prophylactic agent is for oral

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- 8. A food, beverage or feed for regulation of cytokine production, induction of nitrogen monoxide production, or anti-allergy, wherein the food, beverage or feed comprises a fucoidan and/or a degradation product thereof.
- 9. The food, beverage or feed according to claim 8, wherein the fucoidan is derived from an algae or Echinodermata.
- 10. The food, beverage or feed according to claim 8 or 9, wherein the cytokine is an interleukin or an interferon.
- 11. The food, beverage or feed according to claim 10, wherein the interferon is interferon-γ.
- 12. The food, beverage or feed according to claim 10, wherein the interleukin is interleukin-12.
- 13. The food, beverage or feed according to claim 8 or 9, wherein the food, beverage or feed for anti-allergy is a food, beverage or feed for suppression of IgE production.
  - 14. Use of a fucoidan and/or a degradation product thereof for treating or preventing a disease requiring regulation of cytokine production, a disease requiring nitrogen monoxide production, or an allergic disease.

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- 15. Use of a fucoidan and/or a degradation product thereof in the manufacture of a therapeutic agent or prophylactic agent for a disease requiring regulation of cytokine production, a disease requiring nitrogen monoxide production, or an allergic disease.
- 16. A method of treating or preventing a disease requiring regulation of cytokine production, a disease requiring nitrogen monoxide production, or an allergic disease, wherein a fucoidan and/or a degradation product thereof is used.
- 17. An agent for regulation of cytokine production, induction of nitrogen monoxide production, anti-allergy, or suppression of IgE production, comprising as an effective ingredient a fucoidan and/or a degradation product thereof.
- 18. Use of a fucoidan and/or a degradation product thereof in the manufacture of an agent for regulation of cytokine production, induction of nitrogen monoxide, anti-allergy, or suppression of IgE production.
- 19. Use of a fucoidan and/or a degradation product thereof in the manufacture of a food, beverage or feed for regulation of cytokine production, induction of nitrogen monoxide production, or anti-allergy.
  - 20. A method for regulating cytokine production, inducing nitrogen monoxide production, suppressing allergy, or suppressing IgE production, wherein a fucoidan and/or a degradation thereof is used as an effective ingredient.

21. Use of a fucoidan and/or a degradation product thereof for regulating cytokine production, inducing nitrogen monoxide production, suppressing allergy or suppressing IgE production.

## Claim Amendments under PCT Article 34

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- 22. (Added) A cosmetic for regulation of cytokine production, induction of nitrogen monoxide production, or anti-allergy, characterized in that the cosmetic comprises as an effective ingredient a fucoidan and/or a degradation product thereof.
- 23. (Added) The cosmetic according to claim 22, wherein the fucoidan is derived from an algae or Echinodermata.
- 24. (Added) The cosmetic according to claim 22 or 23, wherein the cytokine is an interleukin or an interferon.
- 25. (Added) The cosmetic according to claim 24, wherein the interferon is interferon-γ.
  - 26. (Added) The cosmetic according to claim 24, wherein the interleukin is interleukin-12.
- 27. (Added) The cosmetic according to claim 22 or 23, wherein the cosmetic for anti-allergy is a cosmetic for suppression of IgE production.